

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1        1. (Currently Amended) Apparatus for use in a telephony system, comprising:  
2              a digital interface for connection with a stimulus telephone;  
3              a packet interface for communicating with a packet-based network; and  
4              a controller to receive stimulus control information according to a stimulus  
5              language from the digital interface and to encapsulate the stimulus control information into one  
6              or more packets for transmission over the packet-based network through the packet interface,  
7              wherein the stimulus control information is encapsulated into the one or more packets without  
8              providing messaging according to a language different from the stimulus language in the one or  
9              more packets.

1        2. (Original) The apparatus of claim 1, wherein the controller encapsulates the  
2              stimulus control information into an Internet Protocol packet.

1        3. (Original) The apparatus of claim 1, wherein the digital interface includes a  
2              UART interface.

1        4. (Original) The apparatus of claim 1, wherein the digital interface includes a time  
2              compression multiplex interface.

1        5. (Original) The apparatus of claim 1, wherein the controller adds a destination  
2              address of a telephone switch system into the one or more packets.

1        6. (Previously Presented) The apparatus of claim 1, wherein the controller adds a  
2              destination address of a second stimulus telephone into the one or more packets.

1           7. (Currently Amended) The apparatus of claim 1, ~~wherein the stimulus control~~  
2 ~~information is according to a first stimulus language, and wherein the stimulus control~~  
3 information remains in the first stimulus language after encapsulation.

1           8. (Cancelled)

1           9. (Currently Amended) The apparatus of claim [[8]] 1, wherein the controller  
2 encapsulates the stimulus control information by adding header information according to a  
3 network protocol in the one or more packets, the stimulus control information encapsulated in  
4 the payload section of the one or more packets without providing messaging of a language  
5 different from the stimulus language in the payload section.

1           10. (Original) The apparatus of claim 9, wherein the network protocol header  
2 information includes an Internet Protocol header.

1           11. (Currently Amended) The apparatus of claim 9, wherein the controller adds  
2 further header information according to a transport protocol into the one or more packets.

1           12. (Original) The apparatus of claim 11, wherein the further header information  
2 includes a User Datagram Protocol header.

1        13. (Currently Amended) ~~The apparatus of claim 1, Apparatus for use in a telephony~~  
2 system, comprising:

3              a digital interface for connection with a stimulus telephone;  
4              a packet interface for communicating with a packet-based network; and  
5              a controller to receive stimulus control information from the digital interface and  
6              to encapsulate the stimulus control information into one or more packets for transmission over  
7              the packet-based network through the packet interface,  
8              wherein the controller also scrambles the stimulus message control information  
9              before encapsulation.

1        14. (Original) The apparatus of claim 1, wherein the controller encrypts the one or  
2 more packets.

1        15. (Original) The apparatus of claim 1, further comprising a receiver to receive the  
2 one or more packets, the receiver including an element to decapsulate the one or more packets to  
3 extract the stimulus control information.

1        16. (Original) The apparatus of claim 15, wherein the receiver is associated with a  
2 second stimulus device, and wherein the extracted stimulus control information is in a native  
3 stimulus language of the second stimulus device.

1        17. (Previously Presented) The apparatus of claim 1, wherein the stimulus control  
2 information includes at least one of hook state information and key press event information, the  
3 controller to encapsulate the at least one of the hook state information and key press event  
4 information into the one or more packets.

1        18. (Previously Presented) The apparatus of claim 1, wherein the stimulus control  
2 information includes a command selected from the group consisting of a handset volume control  
3 command, a handset connect/disconnect command, and a ringer activation command, the  
4 controller to encapsulate the command selected from the group consisting of the handset volume  
5 control command, the handset connect/disconnect command, and the ringer activation command.

1        19. (Cancelled)

1        20. (Currently Amended) A method for use in a telephony system, comprising:  
2              communicating stimulus control information with a stimulus telephone through a  
3 first interface connected to the stimulus telephone, and packet information with a packet-based  
4 network through a packet interface;  
5              encapsulating stimulus control information according to a stimulus language  
6 received from the first interface into at least one packet, wherein the stimulus control information  
7 is encapsulated into the at least one packet without providing any messaging according to a  
8 language different from the stimulus language in the at least one packet; and  
9              transmitting the encapsulated stimulus control information [[as]] in the at least  
10 one packet [[to]] from the packet interface over the packet-based network.

1        21. (Previously Presented) The method of claim 20, further comprising:  
2              decapsulating one or more packets received from the packet interface and  
3 containing stimulus control information; and  
4              transmitting the stimulus control information of the decapsulated one or more  
5 packets to the first interface.

1        22. (Currently Amended) The method of claim 20, ~~wherein the stimulus control~~  
2 ~~information is in a native stimulus language, and wherein~~ encapsulating the stimulus control  
3 information includes inserting the stimulus control information in its native stimulus language  
4 into a payload of the at least one packet without translating the stimulus control information into  
5 a different language and without providing the stimulus control information in messaging  
6 according to a language different from the native stimulus language.

1        23. (Original) The method of claim 22, wherein encapsulating the stimulus control  
2 information includes adding a network protocol header to the stimulus control information.

1        24. (Original) The method of claim 23, wherein encapsulating the stimulus control  
2 information includes adding an Internet Protocol header.

1        25. (Original) The method of claim 24, wherein encapsulating the stimulus control  
2 information further includes adding a User Datagram Protocol header.

1        26. (Original) The method of claim 20, further comprising scrambling the stimulus  
2 control information before encapsulating.

1        27. (Original) The method of claim 20, further comprising encrypting the at least one  
2 packet.

1        28. (Currently Amended) An article including one or more machine-readable storage  
2 media containing instructions for call control in a telephony system, the instructions when  
3 executed causing a device to:

4              receive [[data]] stimulus control information according to a stimulus protocol  
5 language from a first interface connected to a stimulus telephone;  
6              encapsulate the [[data]] stimulus control information into one or more UDP/IP  
7 packets, wherein the stimulus control information is encapsulated into the one or more UDP/IP  
8 packets without providing functional messaging according to a language different from the  
9 stimulus language in the one or more UDP/IP packets; and

10             communicate the one or more UDP/IP packets to a packet-based data network.

1        29. (Currently Amended) The article of claim 28, wherein the one or more storage  
2 media contain instructions that when executed causes the device to:

3              receive a packet containing [[data]] stimulus control information according to the  
4 stimulus protocol language;  
5              decapsulate the packet to extract the stimulus control information from the  
6 received packet; and  
7              communicate the ~~data according to the stimulus protocol extracted stimulus~~  
8 control information to the first interface.

1       30. (Currently Amended) A data signal embodied in a carrier wave and containing  
2 instructions for call control in a telephony system, the instructions when executed causing a  
3 device to:

4              receive at least one packet containing a stimulus message according to a first  
5 language, wherein the received at least one packet does not contain messaging according to  
6 another telephony language different from the first language;

7              decapsulate the at least one packet to extract the stimulus message according to  
8 the first language; and

9              send the stimulus message according to the first language to a first interface  
10 connected to a stimulus telephone.

1       31. (Currently Amended) The data signal of claim 30, further containing instructions  
2 that when executed causes the device to:

3              receive a stimulus message according to the first language through the first  
4 interface connected to the stimulus telephone; and

5              encapsulate the stimulus message according to [[a]] the first language into at least  
6 one packet.

1       32. – 34. (Cancelled)

1           35. (Previously Presented) The apparatus of claim 1, further comprising an interface  
2 card adapted to be inserted into a slot of the stimulus telephone, the interface card comprising the  
3 digital interface, the packet interface, and the controller.

1           36. (Previously Presented) The apparatus of claim 1, wherein the digital interface is  
2 adapted to exchange the stimulus control information with the stimulus telephone.

1           37. (Previously Presented) The apparatus of claim 1, wherein the stimulus control  
2 information contains a command according to a stimulus protocol selected from the group  
3 consisting of off-hook, on-hook, handset volume control, handset connect, and handset  
4 disconnect, the controller to encapsulate the command selected from the group consisting of off-  
5 hook, on-hook, handset volume control, handset connect, and handset disconnect in the one or  
6 more packets.

1           38. (Previously Presented) The apparatus of claim 1, further comprising a receiver to  
2 receive one or more inbound packets containing inbound stimulus control information, the  
3 controller to decapsulate the one or more inbound packets to extract the inbound stimulus control  
4 information.

1       39. (Currently Amended) ~~The apparatus of claim 38, Apparatus for use in a telephony~~  
2 system, comprising:

3           a digital interface for connection with a stimulus telephone;  
4           a packet interface for communicating with a packet-based network;  
5           a controller to receive stimulus control information from the digital interface and  
6           to encapsulate the stimulus control information into one or more packets for transmission over  
7           the packet-based network through the packet interface; and  
8           a receiver to receive one or more inbound packets containing inbound stimulus  
9           control information, the controller to decapsulate the one or more inbound packets to extract the  
10          inbound stimulus control information,

11           wherein each of the one or more inbound packets contains a User Datagram  
12          Protocol (UDP) port number, the controller to determine from the UDP port number whether the  
13          corresponding inbound packet contains voice data or stimulus control information.

1       40. (Previously Presented) The method of claim 20, further comprising providing an  
2          interface card to be inserted into a slot of the stimulus telephone, the interface card having the  
3          first interface and the packet interface,

4           wherein encapsulating the stimulus control information and transmitting the  
5          encapsulated stimulus control information and transmitting the encapsulated stimulus control  
6          information is performed by the interface card.

1       41. (Previously Presented) The method of claim 20, wherein encapsulating the  
2          stimulus control information comprises encapsulating a command according to a stimulus  
3          protocol selected from the group consisting of off-hook, on-hook, handset volume control,  
4          handset connect, and handset disconnect.

1       42. (Currently Amended) The method of claim 21, A method for use in a telephony  
2       system, comprising:

3                 communicating stimulus control information with a stimulus telephone through a  
4       first interface connected to the stimulus telephone, and packet information with a packet-based  
5       network through a packet interface;

6                 encapsulating stimulus control information received from the first interface; and  
7                 transmitting the encapsulated stimulus control information as at least one packet  
8       to the packet interface;

9                 decapsulating one or more packets received from the packet interface and  
10      containing stimulus control information; and

11                 transmitting the stimulus control information of the decapsulated one or more  
12      packets to the first interface,

13                 wherein each of the received one or more packets contains a User Datagram  
14       Protocol (UDP) port number, the method further comprising determining from the UDP port  
15       number whether the corresponding received packet contains voice data or stimulus control  
16       information.

1       43. (Currently Amended) The article of claim 28, wherein encapsulating the data  
2       stimulus control information according to the stimulus language protocol comprises  
3       encapsulating one of an off-hook stimulus command, on-hook stimulus command, handset  
4       volume control stimulus command, handset connect stimulus command, and handset disconnect  
5       stimulus command.

1       44. (Previously Presented) The data signal of claim 30, wherein receiving the at least  
2       one packet containing the stimulus message comprises receiving the at least one packet  
3       containing stimulus message containing at least a command selected from the group consisting  
4       of off-hook, on-hook, handset volume control, handset connect, and handset disconnect.

1        45. (Currently Amended) The apparatus of claim [[34]] 48, wherein the stimulus  
2 message contains at least a command selected from the group consisting of off-hook, on-hook,  
3 handset volume control, handset connect, and handset disconnect, the means for encapsulating to  
4 encapsulate the command selected from the group consisting of off-hook, on-hook, handset  
5 volume control, handset connect and handset disconnect.

1        46. – 47. (Cancelled)

1        48. (Currently Amended) ~~The apparatus of claim 34, further comprising An apparatus~~  
2 for use in a telephony system, comprising  
3            means for receiving a stimulus message through a first interface connected to a  
4 stimulus telephone;  
5            means for encapsulating the stimulus message into at least one packet;  
6            means for transmitting the at least one packet to a packet-based network; and  
7            means for scrambling the stimulus message before encapsulating.

49. – 50. (Cancelled)

1        51. (Previously Presented) The apparatus of claim 1, wherein the digital interface is  
2 adapted to communicate with the stimulus telephone through an input/output port of the stimulus  
3 telephone.

1        52. (Currently Amended) The method of claim 20, wherein communicating the  
2 stimulus control information comprises communicating the stimulus control information through  
3 the first interface and an input/output port of the stimulus telephone.

1           53. (Currently Amended) The article of claim 28, wherein receiving the [[data]]  
2       stimulus control information according to the stimulus protocol language comprises receiving the  
3       [[data]] stimulus control information according to the stimulus protocol language through the  
4       first interface and an input/output port of the stimulus telephone.

1           54. (Previously Presented) The data signal of claim 30, wherein sending the stimulus  
2       message comprises sending the stimulus message to the first interface and an input/output port of  
3       the stimulus telephone.

1           55. (Cancelled)